

U.S. Application No.: 09/164,764

Attorney Dkt. No. 001107.76459

Page 2

lung which drains into the sputum.

✓ 24. (Thrice Amended) A method for detecting cancer of an organ in a specimen of a body fluid which drains the organ, wherein the specimen is selected from the group consisting of: urine, sputum, bile, stool, cervical smears, tears, cerebral spinal fluid, and lymph nodes comprising the step of:

testing a plurality of microsatellite markers in the specimen to determine a microsatellite marker length alteration relative to a control sample wherein a microsatellite marker length alteration in the specimen relative to the control sample indicates the presence of a cancer in the organ which drains into the body fluid.

REMARKS

The Invention

The invention is drawn to methods for detecting cancer of an organ in a specimen of a body fluid that drains the organ. The specimen can be urine, sputum, bile, stool, cervical smears, saliva, tears, cerebral spinal fluid, or lymph nodes. A plurality of microsatellite markers in the specimen is tested to determine a microsatellite marker length alteration in the specimen relative to a control sample. A microsatellite marker length alteration in the specimen relative to the control sample indicates the presence of a cancer in the organ that drains into the body fluid.

(Claim 24.) The method can be used to detect lung cancer in a sputum specimen (claim 23), or to detect bladder cancer in a urine specimen (claim 31).

LA

X